ABSTRACT OF THE DISCLOSURE

5

A translinear network (34) has first (Q_1, Q_2, Q_3, Q_4) and second (Q_4, Q_3, Q_5, Q_6) translinear loops. A Trafton-Hastings clamp circuit (36) is connected to generate a piecewise-polynomial-continuous current I_Y , the value of which becomes undefined when current I_X =0 due to a removable singularity in the transfer equation at this point. A current mirror (38) comprising a plurality of transistors (M_1, M_2, M_3) is coupled to the Trafton-Hastings clamp circuit (36), and operates to add additional currents in transistors Q_3 and Q_5 to I_X , when the Trafton-Hastings clamp transistor (Q_7) conducts, so as to perturb the removable singularity in the transfer equation into the left half-plane.